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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,200	09/27/2001	Vijay Seetharaman	JP920000317US1	4431

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IBM CORPORATION
INTELLECTUAL PROPERTY LAW
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EXAMINER
THAI, CANG G

ART UNIT	PAPER NUMBER
3629	

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/966,200	SEETHARAMAN ET AL.
	Examiner	Art Unit
	Cang G. Thai	3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _27 September 2001_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-15_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-15_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All b)☐ Some * c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _09/27/2001_.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1.   Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 507242,

filed on 09/29/2000.

Information Disclosure Statement

2.   The information disclosure statement (IDS) submitted on 09/27/2001 is in

compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is

considering the information disclosure statement.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4.   Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

The basis of this rejection is set forth in a two prong test of:

1.   whether the invention is within the technological arts; and

2.   whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the

technological arts. Mere idea in the abstract (i.e. abstract ideas, law of nature, natural

phenomena) that do not apply, involve, use, or advance the technological arts fail to

promote the "progress of science and the useful arts" (i.e. physical sciences as opposed to social sciences for example), and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, use or advance the technological arts.

In the present case, Claim 1 is directed to "a method of developing a computer software system, comprising the steps of:

defining a first interface between a proposed view sub-system and a proposed business logic sub-system;

defining a second interface between a proposed handler sub-system and the proposed business logic sub-system;

creating the proposed view sub-system in accord with the first interface; and

creating the proposed handler sub-system in accord with the second interface".

In the present case, Claim 1 does not require any technology. The recited steps of developing a computer software system does not apply, involve, use, or advance the technological arts since all of the recited steps can be done with no technology at all. The recited steps only constitute an idea of that separating a large piece of software into its constituent parts makes development and maintenance of the system much easier to manage.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful (specific utility), concrete (repeatability and/or implementation without undue experimentation), and tangible (a real or actual affect) result.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter, which the applicant regards as his invention.

6.   Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

7.   Claim 1 recites the limitation of "sub-system" in "a computer system". There is

insufficient antecedent basis for this limitation in the claim. It appears that the first

interface and second interface should be related, but there is no positive language

showing the first interface and second interface to be related. The preamble mentions

term "computer system" which normally means "the configuration that includes all

functional components of a computer and its associated hardware", but there is no step

of "functional components" in the system. It is also vague on "the proposed handler

sub-system". In the body of the claim, term "interface", which normally means "the point

at which a connection is made between two elements so that they can work with each

other" but no step of "connection" appears in the interface. It appears that they should

be related, but no positive language showing the relationship has been shown.

8.   Claim 11 recites the limitation of "sub-system" in "a computer software system".

There is insufficient antecedent basis for this limitation in the claim. It appears that the

first interface and second interface should be related, but there is no positive language

showing the first interface and second interface to be related. The preamble mentions

the term "computer system", which normally means "the configuration that includes all

functional components of a computer and its associated hardware", but there is no step

of "functional components" in the computer system. It appears that they should be related, but no positive language showing the relationship has been shown. It is not clear on "a view of sub-system, including presentation objects which provide a user interface". There is a step missing for having templates and database prior to view the sub-system.

9.   Claim 13, recites "computer program". The preamble mentions the term "computer program" which normally means "a set of instruction in some computer language intended to be executed on a computer so as to perform some task", but there is no step of "execute" in the computer program. It appears that they should be related, but no positive language showing the relationship has been shown.

10.   Claims 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12.   Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,640,249 (BOWMAN-AMUAH).

As for Claim 1, BOWMAN-AMUAH discloses a method of developing a computer

software system, comprising the steps of: .

defining a first interface between a proposed view sub-system and a proposed

business logic sub-system {See Fig. 40, Element 4006};

defining a second interface between a proposed handler sub-system and the

proposed business logic sub-system {See Fig. 40, Element 4002};

creating the proposed view sub-system in accord with the first interface {See Fig.

40, Element 4006-User Interface}; and

creating the proposed handler sub-system in accord with the second interface

{See Fig. 40, Element 4002-Domain Business Object}.

As for Claim 2, BOWMAN-AMUAH discloses the method according to claim 1,

further comprising the steps of:

defining a third interface between the proposed view sub-system and the

proposed handler sub-system {See Fig. 40, Element 4004}; and

creating the proposed view sub-system in accord with both the first and third

interfaces {See Fig. 40, Element 4004-Process Activity}.

As for Claim 3, BOWMAN-AMUAH discloses the method according to claim 1,

further comprising the steps of:

defining a fourth interface between the proposed view sub-system and the

proposed handler sub-system {See Fig. 40, Element 4006}; and

creating the proposed handler sub-system in accord with both the second and

the fourth interfaces {See Fig. 40, Element 4006}. It appears that the step defining a

forth interface also perform the creating the proposed handler sub-system.

As for Claim 4, which has the same limitations as in Claims 2 and 3, respectively,

therefore, it is rejected for the similar reasons set forth in Claims 2 and 3, respectively.

As for Claim 5, BOWMAN-AMUAH discloses the method according to claim 1,

wherein:

the first interface defines a plurality of methods for data storage and retrieval that

are implemented in the business logic sub-system {Column 110, Lines 49-51, wherein

this reads over "the report distribution database specifies where, when, how, and to

whom to distribute the produced report}.

As for Claim 6, BOWMAN-AMUAH discloses the method according to claim 1,

wherein:

the second interface defines a plurality of methods of business logic that are

implemented in the business logic sub-system {Column 110, Lines 56-57, wherein this

reads over "a user interface function can be built to open and browse report files"}.

As for Claim 7, BOWMAN-AMUAH discloses the method according to claim 2,

wherein:

the third interface is a listener interface that defines a plurality of methods in the

handler sub-system which respond to actions in the view sub-system {Column 110,

Lines 65-67, wherein this reads over "this custom report process is responsible for

processing all messages requesting generation, manipulation, or distribution of reports"}.

As for Claim 8, BOWMAN-AMUAH discloses the method according to claim 3, wherein:

the fourth interface defines a plurality of methods which are implemented in the view sub-system for use by the handler sub-system {Column 111, Lines 7-9, wherein this reads over "report generation is supported by an additional report writer process that contains all application-defined report writer modules"}.

As for Claim 9, BOWMAN-AMUAH discloses the method according to claim 1, wherein:

the view sub-system includes a plurality of user interface objects {See Fig. 1, Element 135};

the handler sub-system includes a plurality of use case control objects {See Fig. 40, Element 4006-UI Controller}; and

the business logic sub-system includes a plurality of business logic objects {See Fig. 10, Element 1024}.

As for Claim 10, BOWMAN-AMUAH discloses the method-according claim 1, wherein:

the sub-systems are created substantially independently of each other once the interfaces have been defined {See Fig. 32, Element 3200}.

As for Claim 11, BOWMAN-AMUAH discloses a computer software system comprising:

a view sub-system including presentation objects which provide a user interface {See Fig. 40, Element 4006};

a business logic sub-system including use case objects which hold business data and implement business functions {See Fig. 40, Element 4004};

a handler sub-system including controller objects which control actions of the view sub-system and actions of the business logic sub-system {See Fig. 40, Element 4002};

a data interface through which the view sub-system obtains business data for the presentation objects {See Fig. 33, Element 3304}; and

a business interface through which the handler sub-system invokes business functions {See Fig. 135, Element 13504}.

As for Claim 12, BOWMAN-AMUAH discloses the system according to claim 11, further comprising:

a listener interface through which the handler sub-system responds to events in the user interface {Column 17, Lines 13-14, wherein this reads over "the architect must being to and researching the needs of the client"}.

As for Claim 12, BOWMAN-AMUAH discloses the system according to claim 11, further comprising:

a view action interface through which the handler sub-system invokes actions in the user interface {Column 2, Lines 22-23, wherein this reads over "validation rules are also structured for validating user data across the multiple user interfaces"}.

As for Claim 13, BOWMAN-AMUAH discloses a computer program comprising:

at least one view object including presentation objects which provide a user interface {See Fig. 40, Element 4002};

at least one business logic object holding business data and implementing business functions {See Fig. 40, Element 4006};

at least one handler object which controls actions of at least one of the view objects and actions of at least one of the business logic objects {See Fig. 40, Element 4004};

a data interface through which the at least one view object obtains business data for the presentation objects {See Fig. 40, Element 3904}; and

a business interface through which the at least one handler object invokes business functions {See Fig. 39, Element 3902}.

As for Claim 14, BOWMAN-AMUAH discloses the computer program according to claim 13, further comprising:

a listener interface through which the handler object responds to events in the user interface {Column 17, Lines 13-14, wherein this reads over "the architect must being to and researching the needs of the client"}.

As for Claim 15, BOWMAN-AMUAH discloses the computer program according to claim 13, further comprising:

a view action interface through which the handler object invokes actions in the user interface {Column 2, Lines 22-23, wherein this reads over "validation rules are also structured for validating user data across the multiple user interfaces"}.

Conclusion

13.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

I.   <u>U.S. Patent:</u>

1)   U.S. Patent No. 6,789,252 (BURKE ET AL.) is cited to teach a method

and a system for providing an open and extensible object definition

framework that manages business object definitions as specifications,

2)   U.S. Patent No. 6,256,773 (BOWMAN-AMUAH) is cited to teach a system,

method, and article of manufacture provided for affording consistency in a

development architecture framework as components in the framework

challenge, and

3)   U.S. Patent No. 6,411,311 (RICH ET AL.) is cited to teach user interface

for transferring items between displayed windows.

II.   <u>Foreign Patent:</u>

1)   WO 90/15379 (ISAACSON ET AL.) is cited to teach image acquisition

apparatus for acquiring pixels of a digital image.

III.   Non-Patent Literature:

1)   Hunter, Jason, McLaughlin, Brett, "Easy Java/XML integration with JDOM,
Part 1; Learn about a new open source API for working with XML", May
24, 2000, JavaWorld, San Francisco, Page 1.

2)   Sugumaran, Vijayan, Bose, Ranjit, "Data analysis and mining
environment: a distributed intelligent agent technology application", 1999,
Volume 99, Issue 2, Industrial Management + Data Systems, Wembley,
Page 71.

3)   Venners, Bill, "Designing with interfaces; One programmer's struggle to
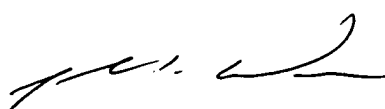understand the interface", December 1, 1998, San Francisco, Page 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cang (James) G. Thai whose telephone number is (703) 305-0553. The examiner can normally be reached on 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CGT
3-3-2005

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